



FINAL CALL FOR PAPERS

35th Annual Review of Progress in Quantitative Nondestructive Evaluation

July 20-25, 2008

***University of Illinois-Chicago (UIC)*
*Chicago, Illinois, U.S.A.***

[Please do not confuse the University of Illinois-Chicago (UIC) with the University of Chicago. UIC is located a few miles from downtown Chicago at the intersection of the Dan Ryan and the Eisenhower Expressways.]

IOWA STATE UNIVERSITY
OF SCIENCE AND TECHNOLOGY

FINAL CALL FOR PAPERS

Papers are sought for the **35th Annual Review of Progress in Quantitative Nondestructive Evaluation** to be held **July 20-25, 2008** at the **University of Illinois-Chicago (UIC)**. The Review is organized by QNDE Programs and hosted by the Center for NDE, a member of the Institute for Physical Research and Technology at Iowa State University. Verbal and poster sessions will be held that emphasize both the basic science and early engineering developments in quantitative NDE and closely related technologies such as materials characterization and process control that utilize quantitative NDE techniques.

Categories of the Review will include advances in:

1. Fundamentals (theoretical and experimental confirmation) of all QNDE methods including generation and propagation of interrogating fields, field-flaw interactions, and probability of detection (POD).
2. Flaw characterization and sizing techniques, including inversion, theories and practice, reconstruction, imaging, and others.
3. All signal processing techniques and applications to QNDE.
4. Sensors, transducers, and probes for flaw detection, material property measurements, process control, long-term health monitoring, and security application.
5. New QNDE applications – all techniques.
6. New QNDE techniques, instruments, and systems.
7. QNDE for materials characterization (properties, microstructure, stress and texture, weldments and joined materials, corrosion, and other degradation mechanisms).
8. QNDE for advanced materials (composites, electronic materials and devices, ceramics, and biological).
9. QNDE for civil structures and materials.
10. Applications of QNDE in design, manufacturing, and process control.
11. Structural health monitoring and prognostics, including smart materials applications.
12. QNDE reliability and inspectability assessments, including applications of POD.
13. **6th Annual Student Poster Competition:** The organizing committee will select up to 20 student entrants on the basis of their submitted abstracts. Only one poster per student will be selected and the student must be 1) the senior author and 2) the presenting author. The posters will be judged on 1) technical content and thoroughness of work; 2) quality of the poster materials and overall presentation; and 3) the student's mastery of the poster subject and her/his ability to defend it during judging. Prizes will be awarded. As well as the traditional reporting of new research results, the poster competition is extended to include experimental demonstrations of new techniques, processes, and devices.
14. Displays and Demonstrations of new, precommercial techniques, instruments, processes (e.g., breadboards and brassboards) are encouraged. The purpose of this program entry is to provide demonstrations of things to come to NDE practitioners as well as to provide feedback to researchers that will enhance their development. The abstract should describe the display, its purpose, and a summary of technical contents of the demonstration. Please provide requirements for the display to qnde3@cnde.iastate.edu.

Abstract Deadline: COB Friday, May 2, 2008

Abstracts will be reviewed by a program committee and author(s) will be informed of acceptance by May 16, 2008. Proceedings will be published by the American Institute of Physics as a hardbound volume with papers on an accompanying CD. **Manuscripts are due Tuesday, September 2, 2008. See manuscript preparation details on the QNDE web site.**

Questions?

Contact Connie Nessa or Sarah Kallsen (515) 294-9749 or qnde1@cnde.iastate.edu.

Submit electronically at: www.cnde.iastate.edu/QNDE/abstracts/